

## **IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (presently amended) A method, comprising:  
  
displaying a graphical user interface that allows a user to select a connection source and a connection destination from a topology of a network that is presented on the graphical user interface;  
  
executing a routing algorithm to determine a path through the network amongst a plurality of possible paths through the network, the path and the possible paths each having ~~said~~ the connection source and ~~said~~ the connection destination as its endpoints; and,  
  
provisioning a connection within the network that corresponds to the path.
2. (Previously presented) The method of claim 1 wherein said executing a routing algorithm further comprises executing a distributed routing algorithm within nodes of the network.
3. (Previously presented) The method of claim 2 wherein said executing a distributed routing algorithm further comprises sending topology information from a first node to a second node within the network.

4. (Previously presented) The method of claim 2 wherein said executing a distributed routing algorithm further comprises sending bandwidth resource information from a first node to a second node within the network.
5. (Previously presented) The method of claim 2 wherein said executing a distributed routing algorithm further comprises sending Quality of Service (QoS) information from a first node to a second node within the network.
6. (Previously presented) The method of claim 1 wherein said executing a routing algorithm further comprises executing the routing algorithm at a network control management system that is coupled to the network.
7. (Original) The method of claim 1 wherein the graphical user interface allows the user to select a bandwidth for the connection.
8. (Previously presented) The method of claim 7 wherein the graphical user interface allows the user to select at least one Quality of Service (QoS) parameter for the connection.
9. (Previously presented) The method of claim 8 wherein the at least one QOS parameter further comprises end-to-end transit delay for the connection.

10. (Previously presented) The method of claim 8 wherein the at least one QoS parameter further comprises jitter.

11. (presently amended) A machine readable medium having instructions stored thereon that when executed by one or more processors cause the one or more processors to perform a method, the method comprising,:

displaying a graphical user interface that allows a user to select a connection source and a connection destination from a topology of a network that is displayed on the graphical user interface; and,

causing a routing algorithm to be executed and a connection to be provisioned, the routing algorithm being executed to determine a path through the network amongst a plurality of possible paths through the network, the path and the possible paths each having the connection source and the connection destination as its endpoints, the connection being provisioned within the network, the connection -corresponding to the path.

12. (Previously presented) The machine readable medium of claim 11 wherein the routing algorithm is a distributed routing algorithm.

13. (Previously presented) The machine readable medium of claim 12 wherein the distributed routing algorithm is designed to send topology information from a first node to a second node within the network.

14. (Previously presented) The machine readable medium of claim 12 wherein the distributed routing algorithm is designed to send bandwidth resource information from a first node to a second node within the network.

15. (Previously presented) The machine readable medium of claim 12 wherein the distributed routing algorithm is designed to send Quality of Service (Qos) information from a first node to a second node within the network.

16. (Previously presented) The machine readable medium of claim 11 further comprising instructions which when executed cause the one or more processors to execute the routing algorithm at a network control management system coupled to the network.

17. (Original) The machine readable medium of claim 11 wherein the graphical user interface allows the user to select a bandwidth for the connection.

18. (Previously presented) The machine readable medium of claim 17 wherein the graphical user interface allows the user to select at least one Quality of Service (QoS) parameter for the connection.

19. (Previously presented) The machine readable medium of claim 18 wherein the at least one QOS parameter further comprises end-to-end transit delay for the connection.

20. (Previously presented) The machine readable medium of claim 18 wherein the at least one QoS parameter further comprises jitter.